

Name: _____

p1029: Combine Like Terms (v9)

Example

Combine like terms.

$$-7x^2 + 5 - 5 - x^2 + 6x - 4x + 2x^2 + 9 - 9x + 8x^2$$

Answer

Combine the quadratic terms.

$$-7x^2 - x^2 + 2x^2 + 8x^2 \equiv 2x^2$$

Combine the linear terms.

$$6x - 4x - 9x \equiv -7x$$

Combine the constant terms.

$$5 - 5 + 9 \equiv 9$$

The final result:

$$2x^2 - 7x + 9$$

Question 1

Combine like terms.

$$8 + 6 + 2x^2 - 3x + x^2 + 9x^2 - 4x - x - 5 + 7$$

$$12x^2 - 8x + 16$$

Question 2

Combine like terms.

$$9x - 3 + 8 + 7x^2 + 3 - 9x + 4x^2 + 2x^2 + x + 6x^2$$

$$19x^2 + x + 8$$

Question 3

Combine like terms.

$$-2x^2 - 9 + 5 - 4x^2 + 8 - 3x - x^2 - 7x + 3x + x^2$$

$$-6x^2 - 7x + 4$$

Question 4

Combine like terms.

$$7 + 5 + 8 - 9x^2 + 6x - 4x + 2x^2 - 6x^2 - 7x + 3x^2$$

$$-10x^2 - 5x + 20$$